ABSTRACT OF THE DISCLOSURE

OPTIMAL CONTROL OF WIDE CONVERSION RATIO SWITCHING CONVERTERS

A switch state controller generating a pulse train is used in a power converter utilizing a plurality of converter stages all simultaneously controlled by a single switch controlled by said pulse train. On time of the pulse train is controlled according to an input or interim node characteristic of the supply and period is controlled by a characteristic of the output of the converter. This allows development of AC-to-DC converters, including power-factor-correction converters, and DC to DC converters with high conversion ratio with minimal parts count & high reliability.